

January 15, 2004

D. Austin Bonderer
Examiner
Art Unit 3732
USPTO
Alexandria, VA

Re: Application No. 10/035,281
Applicant: Rohit K. Khanna

Dear Mr. Bonderer,

I thank you for your response and actions regarding application number 10/035281 filed on 01/03/2002. The following is the response to your actions:

Response to action 4: The examiners objection to claim 40 regarding insufficient antecedent basis for the limitation "the Curvature" has been corrected.

Response to action 5: The objection to claim 41 regarding the double inclusion of "curvature" has been corrected.

Response to action 6: The objection to claim 40 regarding the number of appendages has been defined. The confusion regarding the plate appendages is duly noted and the claim language corrected. The use of the term "appendage is curved at one and straight at the other" describes two appendages - one straight and the other curved.

Response to action 7: The examiner rejects claims 45 and 51 due to use of the restriction carbon fiber. While several materials are mentioned in the previous claims, it is also specified in the body of the specification that the plates are made of various alloys with magnetic resonance compatibility.

Response to action 10: The examiner rejects claims 40 and 46 in view of a patent granted to Senegas.

Senegas does not have any claims with patents granted that describe the methodology and implants for performing a trap-door or expansive laminoplasty. The Senegas implant 16 is very different from the current authors plates as illustrated in Figs. 25, 27, 30 and 32.

The Senegan implant 16 is of a completely different design from the authors plate described in claim 40 and illustrated in Figs. 25 and 27. The Senegan implant is U-shaped whereas the authors plate is S-shaped. The Senegas implant is of a completely different design as well as for use at a different location of the spine, namely between the lamina rather than between the lamina and the facet. The Senegan implant does not describe or illustrate any appendages, either straight 71 or curved 72 as described by the current author. There is also no provision for bone screw holes 69 and 70 to secure the plate to the facet and lamina respectively.

Regarding the rejection of claim 46, the Senegas implant does not have appendages 75 and 76 or bone screw holes 74 and 77 as described by the current author in Fig. 30. There is also no L-shaped plate end design provision to secure the implant to the facets via bone screws as shown in Fig 32. There are no provisions for straight or curved appendages as described in the current authors implants. There are also no provisions for use of either one or two plate appendages. The current authors plates as described in Figs. 25 and 27 are of completely different design as well as for use at a different location of the spine.

Response to actions 11-12: The examiner rejects claims 41-45 and 47-52 as being unpatentable over Senegas in view of Angelucci et al. Of note, neither Senegas or Angelucci et al. have any claims with patents granted describing laminoplasty plates with particular appendages and plate curvatures along with bone screw holes. As per discussions with the examiner and his request for restriction of claims, the claims for plates without appendages have been withdrawn.

The examiner rejects these claims citing the obvious nature of replacing the Senegas

implant bands with screw holes described by Angelucci. The Senegas implant can only be used for the open-door laminoplasty technique and not the trap-door or expansive laminoplasty techniques described by the current applicant. Again, the Senegas implant does not have any similarities to the current applicants implants since there are no provisions for appendages to secure the lamina, no provisions to secure the implant to the facets, a completely different design and methodology of using the implant. The Angelucci plate only allows use in the trap-door laminoplasty technique and not the open-door or expansive laminoplasty. There are also no provisions for intermediary appendages to secure the lamina. Remarkably, the Angelucci plate is similar to the current applicants claims which were withdrawn following discussion with the examiner as being very simplistic. There have been numerous publications in the spine journals published by other authors (including one in which the current applicant participated) describing plates as illustrated in the Angelucci patent which were published several years prior to the patent issue, yet a patent to Angelucci was granted.

While it is understood that even though no prior patent claims have been granted on the methodology and implant design described in the current application, a suggestion to this effect can be construed as prior art. On the same token, no specific suggestions in the prior art reflecting the current implant design and methodology of using thereof have been made. The examiner has modified the implants from Senegas and Angelucci et al. to form the rejection basis. As per 35 U.S.C. 101, the concept of issuing patents is based on either a new and useful improvement of a prior art or a novel concept. The current patent application describes novel laminoplasty methodology and implants for which no prior patent claims exist.

Claim 47 is changed into an independent claim 60 and claims 61-64 are dependent on this claim.

I very much appreciate your input in this matter and look forward to your response.

Sincerely,



Rohit K. Khanna, MD